

VERSION WITH MARKINGS TO SHOW CHANGES MADE
IN THE CLAIMS

1. Method for producing glass-ceramic parts and/or glass parts by means of deformation of a glass-ceramic and/or glass blank, characterized in that forming is carried out using infrared radiation, where the infrared radiation is a short-wave infrared radiation from an infrared radiation source with a color temperature of more than 1500 K, especially preferably more than 2000 K and a portion of the infrared radiation acts directly and another portion acts indirectly on the glass-ceramic blank and/or glass blank where the portion of the radiation acting indirectly on the glass-ceramic blank and/or glass blank is more than 50% of the total radiation output.
2. Method as per claim 1, characterized in that forming is carried out in that a glass-ceramic blank is reprocessed before it is ceramized.
3. Method as per claim 1, characterized in that forming is carried out together with the ceramization of a glass-ceramic blank.
4. Method as per [any of the claims 1 to 3] claim 1, characterized in that the glass-ceramic blank and/or the glass blank is a glass plate.
5. Method as per [any of the claims 1 to 4] claim 1, characterized in that forming is carried out while a glass blank is being softened.
6. Method as per [any of the claims 1 to 5] claim 1, characterized in that forming comprises gravity lowering.
7. Method as per [any of the claims 1 to 6] claim 1, characterized in that forming comprises vacuum lowering.
8. Method as per [any of the claims 1 to 7] claim 1, characterized in that forming comprises lowering by means of a molding plug.
9. Method as per [any of the claims 1 to 8] claim 1, characterized in that forming comprises lowering by blowing.
10. Method as per [any of the claims 1 to 9] claim 1, characterized in that forming comprises a directional infrared irradiation of the glass-ceramic blank and/or glass blank to be formed.
11. Method as per [any of the claims 1 to 10] claim 1, characterized in that forming comprises the use of shields disposed between the infrared radiators and the glass or glass-ceramic blank.
12. Method as per [any of the claims 1 to 11] claim 1, characterized in that forming is carried out in an infrared radiation hollow.

13. Method as per claim 12, characterized in that radiation heating is carried out by means of infrared radiators disposed in the radiation hollow.

14. Method as per [any of the claims 1 to 13] claim 1, characterized in that the glass-ceramic blank and/or glass blank is preheated.

15. Method as per claim 14, characterized in that the glass-ceramic blank and/or glass blank is preheated in a conventional oven.

16. Method as per [any of the claims 1 to 15] claim 1, characterized in that the glass-ceramic and/or the glass is reheated after forming.

17. Method as per claim 16, characterized in that the glass-ceramic and/or the glass is reheated in a conventional oven.

18. Device for carrying out the method as per [any of the claims 1 to 17] claim 1, characterized in that the device comprises:

18.1 an infrared radiation hollow with walls and/or ceiling and/or floor reflecting or back scattering the infrared radiation,

18.2 one or more infrared radiators, radiating infrared radiation with a color temperature of more than 1500 K, especially preferably more than 2000 K.

19. Device as per claim 18, characterized in that the reflectivity or the ability to back scatter of the walls and/or ceiling and/or floor is more than 50% of the impinging radiation.

20. Device as per claim 18, characterized in that the reflectivity or the ability to back scatter of the walls and/or ceiling and/or floor is more than 90% or 95%, especially more than 98% of the impinging radiation.

21. Device as per [any of the claims 18 to 20] claim 18, characterized in that the material of the wall and/or the ceiling and/or the floor back scatters diffusely.

22. Device as per [any of the claims 18 to 21] claim 18, characterized in that the reflecting or back scattering walls and/or ceiling and/or floor comprise one or more of the following materials:

Al_2O_3 ; BaF_2 ; BaTiO_3 ; CaF_2 ; CaTiO_3 ;

MgO 3,5 Al_2O_3 ; MgO , SrF_2 ; SiO_2 ;

SrTiO_3 ; TiO_2 , Spinell, cordierite

cordierite sintered glass ceramic

23. Device as per [any of the claims 18 to 22] claim 18, characterized in that the infrared radiators are cooled, especially air-cooled or water-cooled.

24. Device as per [any of the claims 18 to 23] claim 18, characterized in that the infrared radiators are individually controllable and that their electrical output is controllable.